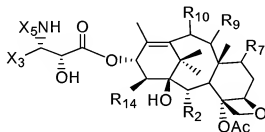


AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in this application.

Listing of claims

Claim 1 (original): A taxane having the formula



R₂ is acyloxy;

R₇ is hydroxy;

R₉ is keto, hydroxy, or acyloxy;

R₁₀ is R_{10a}COO-;

R_{10a} is hydrocarbyl, substituted hydrocarbyl, or heterocyclo wherein said hydrocarbyl or substituted hydrocarbyl contains carbon atoms in the alpha and beta positions relative to the carbon atom of which R_{10a} is a substituent;

R₁₄ is hydrido or hydroxy;

X₃ is heterocyclo or substituted or unsubstituted alkyl, alkenyl, or alkynyl, wherein alkyl comprises at least two carbon atoms;

X₅ is -COX₁₀, -COOX₁₀, or -CONHX₁₀;

X₁₀ is hydrocarbyl, substituted hydrocarbyl, or heterocyclo; and

Ac is acetyl.

Claim 2 (original): The taxane of claim 1 wherein R_{10a} is substituted or unsubstituted C₂ - C₈ alkyl, C₂ - C₈ alkenyl or C₂ - C₈ alkynyl.

Claim 3 (currently amended): The taxane of claim 2 wherein X₃ is 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, or 4-pyridyl, C₂-C₈ alkyl, C₂-C₈ alkenyl, or C₂-C₈ alkynyl.

Claim 4 (original): The taxane of claim 2 wherein X_5 is $-\text{COX}_{10}$ and X_{10} is substituted or unsubstituted phenyl, 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl, or X_5 is $-\text{COOX}_{10}$ and X_{10} is substituted or unsubstituted $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl.

Claim 5 (original): The taxane of claim 2 wherein X_5 is $-\text{COX}_{10}$ and X_{10} is phenyl, or X_5 is $-\text{COOX}_{10}$ and X_{10} is t-butyl.

Claim 6 (original): The taxane of claim 2 wherein R_{14} is hydrido.

Claim 7 (currently amended): The taxane of claim 6 wherein X_3 is 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, or 4-pyridyl, ~~$C_2 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl.~~

Claim 8 (original): The taxane of claim 6 wherein X_5 is $-\text{COX}_{10}$ and X_{10} is substituted or unsubstituted phenyl, 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl or X_5 is $-\text{COOX}_{10}$ and X_{10} is substituted or unsubstituted $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl.

Claim 9 (original): The taxane of claim 6 wherein X_5 is $-\text{COX}_{10}$ and X_{10} is phenyl, or X_5 is $-\text{COOX}_{10}$ and X_{10} is t-butyl.

Claim 10 (original): The taxane of claim 2 wherein R_2 is benzoyloxy.

Claim 11 (currently amended): The taxane of claim 10 wherein X_3 is 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, or 4-pyridyl, ~~$C_2 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl.~~

Claim 12 (original): The taxane of claim 10 wherein X_5 is $-\text{COX}_{10}$ and X_{10} is substituted or unsubstituted phenyl, 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl or X_5 is $-\text{COOX}_{10}$ and X_{10} is substituted or unsubstituted $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl.

Claim 13 (original): The taxane of claim 10 wherein X_5 is $-\text{COX}_{10}$ and X_{10} is phenyl, or X_5 is $-\text{COOX}_{10}$ and X_{10} is t-butyl.

Claim 14 (original): The taxane of claim 2 wherein R_{14} is hydrido and R_9 is keto.

Claim 15 (currently amended): The taxane of claim 14 wherein X_3 is 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, or 4-pyridyl, C_2-C_8 alkyl, C_2-C_8 alkenyl, or C_2-C_8 alkynyl.

Claim 16 (original): The taxane of claim 14 wherein X_5 is $-COX_{10}$ and X_{10} is substituted or unsubstituted phenyl, 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, C_1-C_8 alkyl, C_2-C_8 alkenyl, or C_2-C_8 alkynyl or X_5 is $-COOX_{10}$ and X_{10} is substituted or unsubstituted C_1-C_8 alkyl, C_2-C_8 alkenyl, or C_2-C_8 alkynyl.

Claim 17 (original): The taxane of claim 14 wherein X_5 is $-COX_{10}$ and X_{10} is phenyl, or X_5 is $-COOX_{10}$ and X_{10} is t-butyl.

Claim 18 (original): The taxane of claim 2 wherein R_2 is benzoyloxy and R_9 is keto.

Claim 19 (currently amended): The taxane of claim 18 wherein X_3 is 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, or 4-pyridyl, C_2-C_8 alkyl, C_2-C_8 alkenyl, or C_2-C_8 alkynyl.

Claim 20 (original): The taxane of claim 18 wherein X_5 is $-COX_{10}$ and X_{10} is substituted or unsubstituted phenyl, 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, C_1-C_8 alkyl, C_2-C_8 alkenyl, or C_2-C_8 alkynyl or X_5 is $-COOX_{10}$ and X_{10} is substituted or unsubstituted C_1-C_8 alkyl, C_2-C_8 alkenyl, or C_2-C_8 alkynyl.

Claim 21 (original): The taxane of claim 18 wherein X_5 is $-COX_{10}$ and X_{10} is phenyl, or X_5 is $-COOX_{10}$ and X_{10} is t-butyl.

Claim 22 (original): The taxane of claim 2 wherein R_{14} is hydrido and R_2 is benzoyloxy.

Claim 23 (currently amended): The taxane of claim 22 wherein X_3 is 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, or 4-pyridyl, C_2-C_8 alkyl, C_2-C_8 alkenyl, or C_2-C_8 alkynyl.

Claim 24 (original): The taxane of claim 22 wherein X_5 is $-\text{COX}_{10}$ and X_{10} is substituted or unsubstituted phenyl, 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl or X_5 is $-\text{COOX}_{10}$ and X_{10} is substituted or unsubstituted $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl.

Claim 25 (original): The taxane of claim 22 wherein X_5 is $-\text{COX}_{10}$ and X_{10} is phenyl, or X_5 is $-\text{COOX}_{10}$ and X_{10} is t-butyl.

Claim 26 (original): The taxane of claim 2 wherein R_{14} is hydrido, R_9 is keto, and R_2 is benzoyloxy.

Claim 27 (currently amended): The taxane of claim 26 wherein X_3 is 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, or 4-pyridyl, ~~$C_2 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl.~~

Claim 28 (original): The taxane of claim 26 wherein X_5 is $-\text{COX}_{10}$ and X_{10} is substituted or unsubstituted phenyl, 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl or X_5 is $-\text{COOX}_{10}$ and X_{10} is substituted or unsubstituted $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl.

Claim 29 (original): The taxane of claim 26 wherein X_5 is $-\text{COX}_{10}$ and X_{10} is phenyl, or X_5 is $-\text{COOX}_{10}$ and X_{10} is t-butyl.

Claim 30 (original): The taxane of claim 1 wherein R_{10a} is $C_2 - C_8$ alkyl.

Claim 31 (currently amended): The taxane of claim 30 wherein X_3 is 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, or 4-pyridyl, ~~$C_2 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl.~~

Claim 32 (original): The taxane of claim 30 wherein X_5 is $-\text{COX}_{10}$ and X_{10} is substituted or unsubstituted phenyl, 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl, or X_5 is $-\text{COOX}_{10}$ and X_{10} is substituted or unsubstituted $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl.

Claim 33 (original): The taxane of claim 30 wherein X_5 is $-\text{COX}_{10}$ and X_{10} is phenyl, or X_5 is $-\text{COOX}_{10}$ and X_{10} is t-butyl.

Claim 34 (original): The taxane of claim 30 wherein R_{14} is hydrido.

Claim 35 (currently amended): The taxane of claim 34 wherein X_3 is 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, or 4-pyridyl, ~~$C_2 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl.~~

Claim 36 (original): The taxane of claim 34 wherein X_5 is $-COX_{10}$ and X_{10} is substituted or unsubstituted phenyl, 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl or X_5 is $-COOX_{10}$ and X_{10} is substituted or unsubstituted $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl.

Claim 37 (original): The taxane of claim 34 wherein X_5 is $-COX_{10}$ and X_{10} is phenyl, or X_5 is $-COOX_{10}$ and X_{10} is t-butyl.

Claim 38 (original): The taxane of claim 30 wherein R_2 is benzoyloxy.

Claim 39 (currently amended): The taxane of claim 38 wherein X_3 is 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, or 4-pyridyl, ~~$C_2 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl.~~

Claim 40 (original): The taxane of claim 38 wherein X_5 is $-COX_{10}$ and X_{10} is substituted or unsubstituted phenyl, 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl or X_5 is $-COOX_{10}$ and X_{10} is substituted or unsubstituted $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl.

Claim 41 (original): The taxane of claim 38 wherein X_5 is $-COX_{10}$ and X_{10} is phenyl, or X_5 is $-COOX_{10}$ and X_{10} is t-butyl.

Claim 42 (original): The taxane of claim 30 wherein R_{14} is hydrido and R_9 is keto.

Claim 43 (currently amended): The taxane of claim 42 wherein X_3 is 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, or 4-pyridyl, ~~$C_2 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl.~~

Claim 44 (original): The taxane of claim 42 wherein X_5 is $-\text{COX}_{10}$ and X_{10} is substituted or unsubstituted phenyl, 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl or X_5 is $-\text{COOX}_{10}$ and X_{10} is substituted or unsubstituted $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl.

Claim 45 (original): The taxane of claim 42 wherein X_5 is $-\text{COX}_{10}$ and X_{10} is phenyl, or X_5 is $-\text{COOX}_{10}$ and X_{10} is t-butyl.

Claim 46 (original): The taxane of claim 30 wherein R_2 is benzoyloxy and R_9 is keto.

Claim 47 (currently amended): The taxane of claim 46 wherein X_3 is 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, or 4-pyridyl, ~~$C_2 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl.~~

Claim 48 (original): The taxane of claim 46 wherein X_5 is $-\text{COX}_{10}$ and X_{10} is substituted or unsubstituted phenyl, 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl or X_5 is $-\text{COOX}_{10}$ and X_{10} is substituted or unsubstituted $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl.

Claim 49 (original): The taxane of claim 46 wherein X_5 is $-\text{COX}_{10}$ and X_{10} is phenyl, or X_5 is $-\text{COOX}_{10}$ and X_{10} is t-butyl.

Claim 50 (original): The taxane of claim 30 wherein R_{14} is hydrido and R_2 is benzoyloxy.

Claim 51 (currently amended): The taxane of claim 50 wherein X_3 is 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, or 4-pyridyl, ~~$C_2 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl.~~

Claim 52 (original): The taxane of claim 50 wherein X_5 is $-\text{COX}_{10}$ and X_{10} is substituted or unsubstituted phenyl, 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl or X_5 is $-\text{COOX}_{10}$ and X_{10} is substituted or unsubstituted $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl.

Claim 53 (original): The taxane of claim 50 wherein X_5 is $-COX_{10}$ and X_{10} is phenyl, or X_5 is $-COOX_{10}$ and X_{10} is t-butyl.

Claim 54 (original): The taxane of claim 30 wherein R_{14} is hydrido, R_9 is keto, and R_2 is benzoyloxy.

Claim 55 (currently amended): The taxane of claim 54 wherein X_3 is 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, or 4-pyridyl, ~~$C_2 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl.~~

Claim 56 (original): The taxane of claim 54 wherein X_5 is $-COX_{10}$ and X_{10} is substituted or unsubstituted phenyl, 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl or X_5 is $-COOX_{10}$ and X_{10} is substituted or unsubstituted $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl.

Claim 57 (original): The taxane of claim 54 wherein X_5 is $-COX_{10}$ and X_{10} is phenyl, or X_5 is $-COOX_{10}$ and X_{10} is t-butyl.

Claim 58 (original): The taxane of claim 1 wherein R_{10a} is ethyl.

Claim 59 (currently amended): The taxane of claim 58 wherein X_3 is 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, or 4-pyridyl, ~~$C_2 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl.~~

Claim 60 (original): The taxane of claim 58 wherein X_5 is $-COX_{10}$ and X_{10} is substituted or unsubstituted phenyl, 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl, or X_5 is $-COOX_{10}$ and X_{10} is substituted or unsubstituted $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl.

Claim 61 (original): The taxane of claim 58 wherein X_5 is $-COX_{10}$ and X_{10} is phenyl, or X_5 is $-COOX_{10}$ and X_{10} is t-butyl.

Claim 62 (original): The taxane of claim 58 wherein R_{14} is hydrido.

Claim 63 (currently amended): The taxane of claim 62 wherein X_3 is 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, or 4-pyridyl, ~~$C_2 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl.~~

Claim 64 (original): The taxane of claim 62 wherein X_5 is $-COX_{10}$ and X_{10} is substituted or unsubstituted phenyl, 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl or X_5 is $-COOX_{10}$ and X_{10} is substituted or unsubstituted $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl.

Claim 65 (original): The taxane of claim 62 wherein X_5 is $-COX_{10}$ and X_{10} is phenyl, or X_5 is $-COOX_{10}$ and X_{10} is t-butyl.

Claim 66 (original): The taxane of claim 58 wherein R_2 is benzoyloxy.

Claim 67 (currently amended): The taxane of claim 66 wherein X_3 is 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, or 4-pyridyl, ~~$C_2 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl.~~

Claim 68 (original): The taxane of claim 66 wherein X_5 is $-COX_{10}$ and X_{10} is substituted or unsubstituted phenyl, 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl or X_5 is $-COOX_{10}$ and X_{10} is substituted or unsubstituted $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl.

Claim 69 (original): The taxane of claim 66 wherein X_5 is $-COX_{10}$ and X_{10} is phenyl, or X_5 is $-COOX_{10}$ and X_{10} is t-butyl.

Claim 70 (original): The taxane of claim 58 wherein R_{14} is hydrido and R_9 is keto.

Claim 71 (currently amended): The taxane of claim 70 wherein X_3 is 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, or 4-pyridyl, ~~$C_2 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl.~~

Claim 72 (original): The taxane of claim 70 wherein X_5 is $-COX_{10}$ and X_{10} is substituted or unsubstituted phenyl, 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl or X_5 is $-COOX_{10}$ and X_{10} is substituted or unsubstituted $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl.

Claim 73 (original): The taxane of claim 70 wherein X_5 is $-COX_{10}$ and X_{10} is phenyl, or X_5 is $-COOX_{10}$ and X_{10} is t-butyl.

Claim 74 (original): The taxane of claim 58 wherein R_2 is benzoyloxy and R_9 is keto.

Claim 75 (currently amended): The taxane of claim 74 wherein X_3 is 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, or 4-pyridyl, ~~$C_2 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl.~~

Claim 76 (original): The taxane of claim 74 wherein X_5 is $-COX_{10}$ and X_{10} is substituted or unsubstituted phenyl, 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl or X_5 is $-COOX_{10}$ and X_{10} is substituted or unsubstituted $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl.

Claim 77 (original): The taxane of claim 74 wherein X_5 is $-COX_{10}$ and X_{10} is phenyl, or X_5 is $-COOX_{10}$ and X_{10} is t-butyl.

Claim 78 (original): The taxane of claim 58 wherein R_{14} is hydrido and R_2 is benzoyloxy.

Claim 79 (currently amended): The taxane of claim 78 wherein X_3 is 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, or 4-pyridyl, ~~$C_2 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl.~~

Claim 80 (original): The taxane of claim 78 wherein X_5 is $-COX_{10}$ and X_{10} is substituted or unsubstituted phenyl, 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl or X_5 is $-COOX_{10}$ and X_{10} is substituted or unsubstituted $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl.

Claim 81 (original): The taxane of claim 78 wherein X_5 is $-COX_{10}$ and X_{10} is phenyl, or X_5 is $-COOX_{10}$ and X_{10} is t-butyl.

Claim 82 (original): The taxane of claim 58 wherein R_{14} is hydrido, R_9 is keto, and R_2 is benzoyloxy.

Claim 83 (currently amended): The taxane of claim 82 wherein X_3 is 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, or 4-pyridyl, C_2-C_8 alkyl, C_2-C_8 alkenyl, or C_2-C_8 alkynyl.

Claim 84 (original): The taxane of claim 82 wherein X_5 is $-COX_{10}$ and X_{10} is substituted or unsubstituted phenyl, 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, C_1-C_8 alkyl, C_2-C_8 alkenyl, or C_2-C_8 alkynyl or X_5 is $-COOX_{10}$ and X_{10} is substituted or unsubstituted C_1-C_8 alkyl, C_2-C_8 alkenyl, or C_2-C_8 alkynyl.

Claim 85 (original): The taxane of claim 82 wherein X_5 is $-COX_{10}$ and X_{10} is phenyl, or X_5 is $-COOX_{10}$ and X_{10} is t-butyl.

Claim 86 (original): The taxane of claim 82 wherein X_5 is $-COOX_{10}$ and X_{10} is t-butyl.

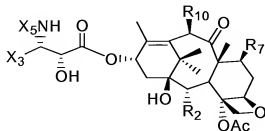
Claim 87 (currently amended): The taxane of claim 86 wherein X_3 is 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, or 4-pyridyl, C_2-C_8 alkyl, C_2-C_8 alkenyl, or C_2-C_8 alkynyl.

Claim 88 (original): The taxane of claim 86 wherein X_3 is 2-furyl.

Claim 89 (original): The taxane of claim 86 wherein X_3 is 2-thienyl.

Claim 90 (cancel)

Claim 91 (currently amended): A taxane having the formula



R_2 is benzoyloxy;

R_7 is hydroxy;

R₁₀ is R_{10a}COO-;

X₃ is substituted or unsubstituted heterocyclo;

X₅ is -COX₁₀, -COOX₁₀, or -CONHX₁₀;

X₁₀ is hydrocarbyl, substituted hydrocarbyl, or heterocyclo; and

R_{10a} is hydrocarbyl, substituted hydrocarbyl, or heterocyclo wherein said hydrocarbyl or substituted hydrocarbyl contains carbon atoms in the alpha and beta positions relative to the carbon of which R_{10a} is a substituent; and

Ac is acetyl.

Claim 92 (original): The taxane of claim 91 wherein X₃ is 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl or 4-pyridyl.

Claim 93 (original): The taxane of claim 92 wherein X₅ is -COX₁₀ and X₁₀ is substituted or unsubstituted phenyl, 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, C₁ - C₈ alkyl, C₂ - C₈ alkenyl, or C₂ - C₈ alkynyl, or X₅ is -COOX₁₀ and X₁₀ is substituted or unsubstituted C₁ - C₈ alkyl, C₂ - C₈ alkenyl, or C₂ - C₈ alkynyl.

Claim 94 (original): The taxane of claim 92 wherein X₅ is -COX₁₀ and X₁₀ is phenyl, or X₅ is -COOX₁₀ and X₁₀ is t-butyl.

Claim 95 (original): The taxane of claim 91 wherein X₃ is furyl or thienyl.

Claim 96 (original): The taxane of claim 95 wherein X₅ is -COX₁₀ and X₁₀ is substituted or unsubstituted phenyl, 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, C₁ - C₈ alkyl, C₂ - C₈ alkenyl, or C₂ - C₈ alkynyl, or X₅ is -COOX₁₀ and X₁₀ is substituted or unsubstituted C₁ - C₈ alkyl, C₂ - C₈ alkenyl, or C₂ - C₈ alkynyl.

Claim 97 (original): The taxane of claim 95 wherein X₅ is -COX₁₀ and X₁₀ is phenyl, or X₅ is -COOX₁₀ and X₁₀ is t-butyl.

Claim 98 (original): The taxane of claim 91 wherein R_{10a} is ethyl or propyl.

Claim 99 (original): The taxane of claim 98 wherein X₃ is 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl or 4-pyridyl.

Claim 100 (original): The taxane of claim 99 wherein X_5 is $-\text{COX}_{10}$ and X_{10} is substituted or unsubstituted phenyl, 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl, or X_5 is $-\text{COOX}_{10}$ and X_{10} is substituted or unsubstituted $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl.

Claim 101 (original): The taxane of claim 99 wherein X_5 is $-\text{COX}_{10}$ and X_{10} is phenyl, or X_5 is $-\text{COOX}_{10}$ and X_{10} is t-butyl.

Claim 102 (original): The taxane of claim 98 wherein X_3 is furyl or thienyl.

Claim 103 (original): The taxane of claim 102 wherein X_5 is $-\text{COX}_{10}$ and X_{10} is substituted or unsubstituted phenyl, 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl, or X_5 is $-\text{COOX}_{10}$ and X_{10} is substituted or unsubstituted $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl.

Claim 104 (original): The taxane of claim 91 wherein X_3 is substituted or unsubstituted furyl, R_{10a} is ethyl, and X_5 is $-\text{COX}_{10}$ and X_{10} is phenyl, or X_5 is $-\text{COOX}_{10}$ and X_{10} is t-butyl.

Claim 105 (original): The taxane of claim 91 wherein X_3 is substituted or unsubstituted thienyl, R_{10a} is ethyl, and X_5 is $-\text{COX}_{10}$ and X_{10} is phenyl, or X_5 is $-\text{COOX}_{10}$ and X_{10} is t-butyl.

Claim 106 (original): The taxane of claim 91 wherein X_3 is 2-furyl or 2-thienyl, R_{10a} is ethyl, X_5 is $-\text{COOX}_{10}$ and X_{10} is t-butyl.

Claim 107 (original): The taxane of claim 91 wherein X_3 is 2-furyl, R_{10a} is ethyl, X_5 is $-\text{COOX}_{10}$ and X_{10} is t-butyl.

Claim 108 (original): The taxane of claim 91 wherein X_3 is 2-thienyl, R_{10a} is ethyl, X_5 is $-\text{COOX}_{10}$ and X_{10} is t-butyl.

Claim 109 (original): A pharmaceutical composition comprising the taxane of claim 1 and at least one pharmaceutically acceptable carrier.

Claim 110 (currently amended): The pharmaceutical composition of claim 109 wherein X_3 is 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, or 4-pyridyl, ~~C_2-C_8 alkyl, C_2-C_8 alkenyl, or C_2-C_8 alkynyl.~~

Claim 111 (original): The pharmaceutical composition of claim 110 wherein X_5 is $-COX_{10}$ and X_{10} is substituted or unsubstituted phenyl, 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, C_1-C_8 alkyl, C_2-C_8 alkenyl, or C_2-C_8 alkynyl, or X_5 is $-COOX_{10}$ and X_{10} is substituted or unsubstituted C_1-C_8 alkyl, C_2-C_8 alkenyl, or C_2-C_8 alkynyl.

Claim 112 (original): The pharmaceutical composition of claim 110 wherein X_5 is $-COX_{10}$ and X_{10} is phenyl, or X_5 is $-COOX_{10}$ and X_{10} is t-butyl.

Claim 113 (original): The pharmaceutical composition of claim 109 wherein R_{10a} is ethyl or propyl.

Claim 114 (currently amended): The pharmaceutical composition of claim 113 wherein X_3 is 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, or 4-pyridyl, ~~C_2-C_8 alkyl, C_2-C_8 alkenyl, or C_2-C_8 alkynyl.~~

Claim 115 (original): The pharmaceutical composition of claim 114 wherein X_5 is $-COX_{10}$ and X_{10} is substituted or unsubstituted phenyl, 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, C_1-C_8 alkyl, C_2-C_8 alkenyl, or C_2-C_8 alkynyl, or X_5 is $-COOX_{10}$ and X_{10} is substituted or unsubstituted C_1-C_8 alkyl, C_2-C_8 alkenyl, or C_2-C_8 alkynyl.

Claim 116 (original): The pharmaceutical composition of claim 114 wherein X_5 is $-COX_{10}$ and X_{10} is phenyl, or X_5 is $-COOX_{10}$ and X_{10} is t-butyl.

Claim 117 (original): The pharmaceutical composition of claim 110 wherein X_3 is furyl or thienyl, R_{10a} is ethyl, and X_5 is $-COX_{10}$ and X_{10} is phenyl, or X_5 is $-COOX_{10}$ and X_{10} is t-butyl.

Claim 118 (original): The pharmaceutical composition of claim 110 wherein X_3 is substituted or unsubstituted furyl, R_{10a} is ethyl, and X_5 is $-COX_{10}$ and X_{10} is phenyl, or X_5 is $-COOX_{10}$ and X_{10} is t-butyl.

Claim 119 (original): The pharmaceutical composition of claim 110 wherein X_3 is substituted or unsubstituted thienyl, R_{10a} is ethyl, and X_5 is $-COOX_{10}$ and X_{10} is phenyl, or X_5 is $-COOX_{10}$ and X_{10} is t-butyl.

Claim 120 (cancel)

Claim 121 (cancel)

Claim 122 (original): The pharmaceutical composition of claim 110 wherein X_3 is 2-furyl or 2-thienyl, R_{10a} is ethyl, X_5 is $-COOX_{10}$ and X_{10} is t-butyl.

Claim 123 (original): The pharmaceutical composition of claim 110 wherein X_3 is 2-furyl, R_{10a} is ethyl, X_5 is $-COOX_{10}$ and X_{10} is t-butyl.

Claim 124 (original): The pharmaceutical composition of claim 110 wherein X_3 is 2-thienyl, R_{10a} is ethyl, X_5 is $-COOX_{10}$ and X_{10} is t-butyl.

Claim 125 (cancel):

Claim 126 (cancel):

Claim 127 (original): A pharmaceutical composition comprising the taxane of claim 91 and at least one pharmaceutically acceptable carrier.

Claim 128 (original): A pharmaceutical composition comprising the taxane of claim 95 and at least one pharmaceutically acceptable carrier.

Claim 129 (original): A composition for oral administration comprising the taxane of claim 1 and at least one pharmaceutically acceptable carrier.

Claim 130 (currently amended): The composition of claim 129 wherein X_3 is 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, or 4-pyridyl, C_2-C_8 alkyl, C_2-C_8 alkenyl, or C_2-C_8 alkynyl.

Claim 131 (original): The composition of claim 130 wherein R_{10a} is ethyl or propyl.

Claim 132 (original): The composition of claim 131 wherein X_5 is $-COX_{10}$ and X_{10} is phenyl, or X_5 is $-COOX_{10}$ and X_{10} is t-butyl.

Claim 133 (original): The composition of claim 131 wherein R_{14} is hydrogen, R_2 is benzoyloxy, and X_5 is $-COX_{10}$ wherein X_{10} is phenyl, or X_5 is $-COOX_{10}$ wherein X_{10} is t-butyl.

Claims 134-136 (cancel)

Claim 137 (original): A method of inhibiting tumor growth in mammals, said method comprising orally administering a therapeutically effective amount of a pharmaceutical composition comprising the taxane of claim 1 and at least one pharmaceutically acceptable carrier.

Claim 138 (currently amended): The method of claim 137 wherein X_3 is 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, or 4-pyridyl, ~~C_2-C_8 alkyl, C_2-C_8 alkenyl, or C_2-C_8 alkynyl.~~

Claim 139 (original): The method of claim 138 wherein R_{10a} is ethyl or propyl.

Claim 140 (original): The method of claim 139 wherein X_5 is $-COX_{10}$ and X_{10} is phenyl, or X_5 is $-COOX_{10}$ and X_{10} is t-butyl.

Claim 141 (original): The method of claim 140 wherein R_{14} is hydrogen and R_2 is benzoyloxy.

Claim 142 (cancel)

Claim 143 (cancel)

Claim 144 (original): The method of claim 141 wherein X_3 is furyl or thienyl; R_{10a} is ethyl; and X_5 is $-COX_{10}$ and X_{10} is phenyl.

Claim 145 (cancel)

Claim 146 (original): The taxane of claim 1 wherein R_{10a} is propyl, X_3 is 2-furyl, and X_5 is $-\text{COX}_{10}$ and X_{10} is propyl, trans-propenyl, butenyl, 2-thienyl or 2-furyl, or X_5 is $-\text{COOX}_{10}$ and X_{10} is ethyl, isopropyl or isobutyl.

Claim 147 (original): The taxane of claim 1 wherein R_{10a} is propyl, X_3 is 2-thienyl, and X_5 is $-\text{COX}_{10}$ and X_{10} is propyl, trans-propenyl, isobutenyl, butenyl, phenyl, 2-thienyl, 2-furyl or 3-pyridyl, or X_5 is $-\text{COOX}_{10}$ and X_{10} is ethyl, isopropyl or isobutyl.

Claim 148 (original): The taxane of claim 1 wherein R_{10a} is propyl, X_3 is 3-furyl, and X_5 is $-\text{COX}_{10}$ and X_{10} is trans-propenyl, or X_5 is $-\text{COOX}_{10}$ and X_{10} is isobutyl.

Claim 149 (original): The taxane of claim 1 wherein R_{10a} is propyl, X_3 is 3-thienyl, and X_5 is $-\text{COOX}_{10}$ and X_{10} is isobutyl.

Claim 150 (original): The taxane of claim 1 wherein R_{10a} is cyclopropyl, X_3 is 2-furyl, and X_5 is $-\text{COX}_{10}$ and X_{10} is propyl, trans-propenyl, butenyl, phenyl, 2-thienyl or 2-furyl, or X_5 is $-\text{COOX}_{10}$ and X_{10} is ethyl, isopropyl, isobutyl or t-butyl.

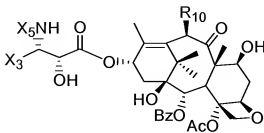
Claim 151 (original): The taxane of claim 1 wherein R_{10a} is cyclopropyl, X_3 is 2-thienyl, and X_5 is $-\text{COX}_{10}$ and X_{10} is propyl, trans-propenyl, butenyl, isobutenyl, phenyl, 2-thienyl, 2-furyl or 3-pyridyl or X_5 is $-\text{COOX}_{10}$ and X_{10} is ethyl, isopropyl, isobutyl or t-butyl.

Claim 152 (original): The taxane of claim 1 wherein R_{10a} is cyclopropyl, X_3 is 3-furyl or 3-thienyl, and X_5 is $-\text{COX}_{10}$ and X_{10} is trans-propenyl or phenyl, or X_5 is $-\text{COOX}_{10}$ and X_{10} is isobutyl or t-butyl.

Claim 153 (original): The taxane of claim 1 wherein R_{10a} is cyclopropyl, X_3 is 2-pyridyl or 4-pyridyl, and X_5 is $-\text{COX}_{10}$ and X_{10} is phenyl, or X_5 is $-\text{COOX}_{10}$ and X_{10} is t-butyl.

Claim 154 (original): The taxane of claim 1 wherein R_{10a} is ethyl, X_3 is 2-furyl, and X_5 is $-\text{COOX}_{10}$ and X_{10} is t-amyl.

Claim 155 (original): A taxane having the formula



R_{10} is $R_{10a}COO-$;

R_{10a} is ethyl;

X_3 is isopropyl, cyclopropyl, cyclobutyl, cyclopentyl, 2-thienyl, 3-thienyl, 2-furyl, 3-furyl, 2-pyridyl, 3-pyridyl or 4-pyridyl;

X_5 is $-COX_{10}$ and X_{10} is propyl, butenyl, isobutenyl, phenyl, 2-thienyl, 2-furyl, 3-pyridyl or 4-pyridyl or X_5 is $-COOX_{10}$ and X_{10} is ethyl, isopropyl, isobutyl or t-butyl; and

Ac is acetyl.

Claim 156 (original): The taxane of claim 155 wherein X_3 is 2-thienyl, 3-thienyl, 2-furyl or 3-furyl.

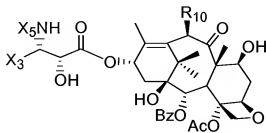
Claim 157 (original): The taxane of claim 155 wherein X_5 is $-COX_{10}$ and X_{10} is propyl or phenyl or X_5 is $-COOX_{10}$ and X_{10} is isopropyl, isobutyl or t-butyl.

Claim 158 (original): The taxane of claim 155 wherein X_3 is 2-thienyl.

Claim 159 (original): The taxane of claim 155 wherein X_3 is 2-furyl.

Claim 160 (original): The taxane of claim 91 wherein R_{10a} is ethyl, X_3 is 2-thienyl, 2-furyl or 3-furyl, and X_5 is $-COX_{10}$ and X_{10} is trans-propenyl.

Claim 161 (original): A taxane having the formula



R_{10} is $R_{10a}COO^-$;

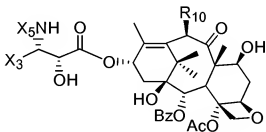
R_{10a} is propyl;

X₃ is isopropyl, cyclopropyl, cyclobutyl, 2-thienyl, 3-thienyl, 2-furyl, 3-furyl, 2-pyridyl, 3-pyridyl or 4-pyridyl;

X₅ is -COOX₁₀ and X₁₀ is t-butyl; and

Ac is acetyl.

Claim 162 (original): A taxane having the formula



R_{10} is $R_{10a}COO^-$;

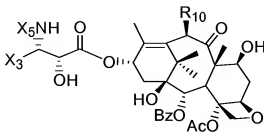
R_{10a} is 2-thienyl or 2-furyl;

X₃ is isopropyl, cyclobutyl, isobutenyl, 2-thienyl, 3-thienyl, 2-furyl, 3-furyl, 2-pyridyl, 3-pyridyl, 4-pyridyl or p-nitrophenyl;

X₅ is -COOX₁₀ and X₁₀ is t-butyl; and

Ac is acetyl.

Claim 163 (original): A taxane having the formula:



R_{10} is $R_{10a}COO-$;

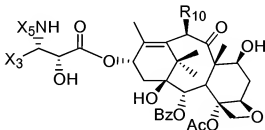
R_{10a} is isobutenyl;

X_3 is isobutenyl, 2-thienyl, 3-thienyl, 2-furyl, 3-furyl, 2-pyridyl or 4-pyridyl;

X_5 is $-COOX_{10}$ and X_{10} is t-butyl; and

Ac is acetyl.

Claim 164 (original): A taxane having the formula



R_{10} is $R_{10a}COO-$;

R_{10a} is isopropyl or trans-propenyl;

X_3 is isopropyl, cyclobutyl, isobutenyl, 2-thienyl, 3-thienyl, 2-furyl, 3-furyl, 2-pyridyl, 4-pyridyl or p-nitrophenyl;

X_5 is $-COOX_{10}$ and X_{10} is t-butyl; and

Ac is acetyl.

Claim 165 (new): The taxane of claim 91 wherein X_3 is heterocyclo substituted by one or more of the groups selected from hydrocarbyl, substituted hydrocarbyl, keto, hydroxy, protected hydroxy, acyl, acyloxy, alkoxy, alkenoxy, alkynoxy, aryloxy, halogen, amido, amino, nitro, cyano, thiol, ketals, acetals, esters and ethers.

Claim 166 (new): The taxane of claim 91 wherein X_3 is heteroaryl.

Claim 167 (new): The taxane of claim 166 wherein X_3 is furyl, thienyl, pyridyl, oxazolyl, pyrrolyl, indolyl, or isoquinolinyl.

Claim 168 (new): The taxane of claim 91 wherein X_5 is $-\text{COOX}_{10}$ and X_{10} is $\text{C}_1\text{-C}_8$ alkyl.

Claim 169 (new): The taxane of claim 168 wherein X_{10} is ethyl or straight or cyclic propyl, butyl, pentyl or hexyl.

Claim 170 (new): The taxane of claim 168 wherein X_{10} is branched propyl, pentyl or hexyl.

Claim 171 (new): The taxane of claim 1 wherein R_9 is hydroxy.

Claim 172 (new): The taxane of claim 1 wherein R_9 is acyloxy.

Claim 173 (new): The taxane of claim 1 wherein R_{14} is hydroxy.

Claim 174 (new): The taxane of claim 91 wherein R_{10a} is $\text{C}_2\text{-C}_6$ alkyl.

Claim 175 (new): The taxane of claim 91 having the formula:

